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**REVISED GOVERNMENT RESOLUTION FOR PARTICIPATORY IRRIGATION
DEVELOPMENT AND MANAGEMENT WITHIN PILOT PHASE OF MINOR
IRRIGATION PROGRAMME - MAHARASHTRA**

Minor Irrigation Schemes co-financed by KfW
Participatory development and management of
Minor Irrigation Schemes with command areas of
100 to 250 hectares (Local Sector)

GOVERNMENT OF MAHARASHTRA

Rural Development and Water Conservation Department
Resolution No. MIS 1002/CR-144/Jal-1
Mantapaya, Mumbai 400 032
Dated: 09.07.2002

Reference: 1) RD&WCD: Resolution No. MIS 1188/CR-255/Jal-1, dated 7 March 2000
2) RD&WCD: Resolution No. MIS 1089/CR-347/Jal-1, dated 31 July 2000

PREAMBLE:

The Government of Maharashtra (GoM) has constructed a large number of Major, Medium and Minor Irrigation Projects to ensure the regular supply of water to the agricultural sector. The operation and maintenance (O&M) of the Irrigation Infrastructure remained the responsibility of the Government. In order to improve the management of the existing irrigation schemes, including the supply of irrigation water in a timely and equitable manner, the Government developed a policy and issued various guidelines to involve water users in the O&M of existing irrigation (sub-)systems. For this purpose, irrigation water is supplied on volumetric basis to Water Users Associations (WUAs), which received 20% of the collected water charges as management subsidy for the O&M of the distribution system in their respective command areas. The Government remains responsible for the management of the headworks and main canals as well as for the collection of the due water charges.

However, the Government has observed that there has not been sufficient progress and success in the transfer of irrigation management to WUAs as the water users do not feel that they are fully involved in the management of the irrigation schemes. To ensure greater and more effective participation of the water users in irrigation management, the Rural Development and Water Conservation Department (RD&WCD) has found it necessary to adopt a new approach for the development and management of Minor Irrigation Schemes (MIS).

To facilitate the development of a new approach for the participatory development and management of MIS, the GoM and the Kreditanstalt für Wiederaufbau (KfW) have agreed to co-finance the construction of up to 105 MIS in 18 districts of the State of Maharashtra during a period of 8 years under the Minor Irrigation Programme - Maharashtra (MIP-M). MIP-M is based on a study conducted in 1984-1986 and it has been appraised by KfW in 1997 before the Loan Agreement was signed in 1999. MIP-M is divided into two phases: a) Pilot Phase of three years during which up to 25 schemes in six districts will be constructed; and b) Main Phase of five years during which up to 80 schemes in 18 districts will be built. One of the main aims of the pilot phase is the development and field testing of a new approach for the participatory development and management of newly constructed MIS.

Prior to the start of MIP-M and with the above-mentioned objectives in view, the GoM through the RD&WCD issued two Government Resolutions for the handing over of MIS to WUAs for the purpose of irrigation management. However, KfW considered them to be deficient and recommended that clarifications be provided to ensure that all terms and conditions for the implementation of the MIP-M as stipulated in the Separate Agreement to the Loan Agreement and Project Agreement dated 11 May 1999 are covered. In particular, the concept that the envisaged

water users should participate right from start of the entire scheme preparation and implementation process, must be clearly reflected in the concerned Government Resolution.

Hence, the GoM through the RD&WCD has reviewed the relevant Government Resolutions and has decided that the participatory development and management of Minor Irrigation Schemes, which are co-financed by KfW under MIP-M, should be implemented in accordance with the following revised resolution.

RESOLUTIONS:

1 Scheme Preparation

1.1 Participatory Irrigation Development and Management Approach (PIDM): The development of MIS within the Minor Irrigation Programme shall follow the PIDM procedures as given in the Procedure Manual on Participatory Irrigation Development and Management, MIP-M Technical Note 15, Revised December 2001 or subsequent editions.

1.2 Scheme Working Team: To facilitate the development of the MIS, an inter-disciplinary Scheme Working Team consisting of a representative of the RD&WCD, the Department of Agriculture and an NGO appointed within the District (Scheme NGO) shall be assigned to work with the envisaged water users and their representatives in all stages of scheme development.

1.3 Participatory Design: The envisaged water users shall have the right to participate fully in all stages of the planning and design of the MIS, including decisions regarding type of distribution system and allocation of water rights. To facilitate the effective participation of the envisaged water users in the planning and design of the MIS, they shall form a Farmer Design Committee at the start of the participatory design process. Although this committee shall have the authority to take decisions during the participatory design process, the final outcome of that process, i.e. system layout, shall be submitted for approval to all envisaged water users during one or more general meetings.

1.4 Project Identification Report: The Project Identification Report (PIR) shall only be finalized and submitted to the GoM and KfW for sanctioning if the proposed MIS is:

- ☐ Technically, economically, environmentally and socially feasible;
- ☐ All (revised) Project Selection Criteria are fulfilled, which are enclosed with this Government Resolution in Annex B; and
- ☐ System layout has been approved by majority of envisaged water users and System Layout Agreement has been signed.

1.5 Detailed Project Report: Only after the PIR has been sanctioned by the GoM and KfW, the preparation of the Detailed Project Report (DPR), including detailed design, shall be undertaken in consultation with the envisaged water users. The DPR shall only be submitted to the GoM for approval if the detailed design have been formally approved by the majority of WUA members.

1.6 Land Acquisition: Following the sanctioning of the PIR, the process to acquire the land required for the development of the MIS shall be started by the concerned authorities. To facilitate the smooth implementation of the land acquisition process, the concerned communities shall be actively involved in all stages of this process and all project affected households shall be fully informed about the procedures and their rights in accordance with the provisions in the Land Acquisition Act 1894. To ensure that a large majority of project affected households have accepted the estimated award for their land to be acquired for the development of the proposed MIS, at least 75% of the project affected households shall sign the Land Acquisition Agreement.

1.7 WUA Formation and Registration: Immediately after the sanctioning of the PIR, the establishment of the WUA shall commence with the support of a Non-Governmental Organisation (NGO). The formation of the WUA shall fulfil the following conditions:

- ☐ Every landholder having land in the command area of the MIS shall have the right to become member of the WUA and membership of the WUA is on a voluntarily basis;
- ☐ Not less than 51% of the landholders and/or occupiers in the command area shall be members of the WUA.

- (Model) Constitution shall be adopted and scheme-specific Bye-laws shall be drafted and approved by the majority of WUA members;
- Executive Committee comprising at least a Chairperson, Deputy Chairperson, Secretary and Treasurer shall be formed; and
- Bank account in the name of the WUA shall be opened with an initial deposit equivalent to at least 10% of the estimated annual O&M costs.

1.8 The newly established WUA shall be registered as a corporate body either under the Cooperative Act 1960 or the Societies Registration Act.

1.9 Scheme Agreement: Only if the DPR has been approved by the GoM, the Land Acquisition Agreement has been signed by at least 75% of the project affected households and an application for WUA registration has been submitted, a Scheme Agreement shall be signed between the WUA, RD&WCD, Department of Agriculture and NGO, in which the following principles and conditions regarding the construction of the MIS and institutional strengthening of the WUA are specified.

2 Scheme Construction and Institutional Strengthening

2.1 Main and Farmers' Works: The Main Works, i.e. headworks, shall be executed by the RD&WCD through a contractor under the Main Contract, whereas the Farmers' Works, i.e. distribution and drainage system with associated structures, shall be implemented by the WUA under the Farmers' Works Construction Agreement with the RD&WCD.

2.2 The Main Contract and Farmers' Works Construction Agreement shall include clauses relating to the work programme and actions to be taken in the event of progress falling behind programme, including the provision for suspending and eventually terminating the Main and Farmers' Works.

2.3 Inspections: Following the completion of the Main and Farmers' Works, one or more joint inspections shall be conducted to assess if all construction works have been carried out in accordance with the specifications in the Main Contract and Farmers' Works Construction Agreement respectively. Any outstanding works shall be carried out by the contractor and/or WUA according to an agreed time schedule.

2.4 Commissioning: Before the WUA takes up the full responsibility for the O&M of the completed MIS, the entire scheme shall be commissioned by operating it at full design capacity for a period of at least seven days. Any remedial works shall be carried out by the contractor and/or WUA in accordance with an agreed time schedule.

2.5 Farmers' Contributions to Capital Cost: The WUA shall be required to contribute towards the capital cost of the Farmers' Works in accordance with a financing schedule specified in the Scheme Agreement. The WUA shall contribute 82.5% towards the capital cost of any lift equipment including any related structures and electricity connections, 62.5% of the capital cost of the entire distribution system including any associated structures and 100% of all capital cost related to on-farm works.

2.6 WUA Training and Support: The RD&WCD shall provide technical assistance and training to the WUA to ensure that the WUA has the ability to undertake the Farmers' Works in an effective and timely manner. In addition, the RD&WCD shall provide and/or arrange the provision of training and support to the WUA in various aspects of operating and maintaining the MIS.

2.7 The NGO shall ensure that the required training and support to the WUA for administrative and financial management of the WUA is undertaken.

2.8 The Department of Agriculture with the support of the NGO shall ensure the implementation of a comprehensive agricultural extension and land development programme in collaboration with the WUA to ensure that the farmers can use the supplied irrigation water efficiently and develop their irrigation agriculture effectively, including the promotion of improved water management and utilisation of water-saving technologies, i.e. sprinkler and drip systems.

2.9 Exemption from royalties on quarried construction materials including water: The WUA shall be exempt from paying any royalties on all quarried materials including water, used in the execution of the Farmers' Works.

3 Scheme Management

3.1 Irrigation Management Agreement: Following the successful commissioning of the completed MIS, the RD&WCD and the WUA shall sign the Irrigation Management Agreement, in which the following principles and conditions with regard to the O&M of the MIS and management of the WUA are specified.

3.2 Inventory: The RD&WCD shall undertake in collaboration with the WUA a detailed inventory of all as-built irrigation, drainage and associated infrastructure, for which the O&M shall be the full responsibility of the WUA.

3.3 Legal Ownership: The entire distribution and drainage system and associated structures shall be the property in the name of the WUA and, therefore, the WUA shall be responsible for the financing and execution of all routine maintenance and any emergency repairs due to unforeseen circumstances, such as major floods and earthquakes. Responsibility for the care of the land acquired by the Government on which the distribution system is constructed, shall be vested in the WUA.

3.4 Although the WUA shall be responsible for the routine O&M, the headworks and the land on which these structures are built shall be the property of the GoM and, therefore, the RD&WCD shall be responsible for the execution of any Major Repairs to headworks due to unforeseen circumstances.

3.5 For KT Weirs, although ownership of the main structure shall remain with the Government, the ownership of the needles shall be passed to the WUA who will have full responsibility for their insertion, removal, care, maintenance and replacement.

3.6 For any MIS where an office cum storage building has been constructed as part of the headworks, ownership of this building shall be passed to the WUA who shall have full responsibility for its use, care and maintenance.

3.7 Water Right: The WUA shall have the right to use all the water stored by the headworks for irrigation purposes in accordance with a water availability certificate issued by the Irrigation Department, but a maximum of 15% of the total amount of stored water may be reserved for non-irrigation/domestic use in accordance with existing legislation.

3.8 The WUA shall supply water equitably to all land holders and/or occupiers in its command area, irrespective of the fact as to whether or not they have become members of the WUA.

3.9 If the WUA is unable to supply the sanctioned discharge to the water users due to unforeseen operational difficulties, the supply to each sanctioned outlet shall be proportionally reduced.

3.10 Operation and Maintenance: The WUA shall be fully responsible for the financing and execution of the O&M of the entire MIS, including the headworks, to ensure that the entire system can supply the sanctioned discharge to the water users in accordance with agreed schedules and to prevent any wastage of water.

3.11 The WUA shall have the authority to contract out the operation and/or maintenance of the MIS partly or entirely or contractor(s). The WUA may transfer the O&M of irrigation, drainage and associated structures within the command area of an outlet, which is also known as Chak, to a Chak Committee formed by at least 51% of all irrigators with land in the outlet command area.

3.12 The WUA shall protect the MIS and any other property of the WUA and/or RD&WCD within its area of jurisdiction from any damage. In addition, the WUA shall promote efficient water use and management practices, including the utilisation of water-saving technologies, conjunctive use of ground water and canal water as well as improved land use and agricultural practices.

3.13 If there is any likelihood of danger to the MIS due to heavy rainfall and/or floods in the river, the WUA shall immediately undertake all necessary protective measures possible to avoid any damage to the MIS and it shall inform the RD&WCD immediately about any emergency situation.

3.14 The WUA shall not carry out any structural changes and/or additional works on the headworks of the MIS without the written permission of the RD&WCD.

3.15 The RD&WCD shall provide the WUA all relevant data required for the adequate O&M of the MIS, including as-built drawings, water levels and rated discharges for the entire system.

3.16 Flow Measurement: The actual supply of irrigation water shall be recorded daily by the WUA at the head of the main distribution for gravity irrigation schemes and pumping hours for lift irrigation schemes.

3.17 Inspections: The RD&WCD and the WUA shall undertake regular joint inspections of all irrigation, drainage and associated structures to ensure that the entire MIS is being properly operated and maintained by the WUA. In addition, the RD&WCD shall have the full power to inspect and check any component of the MIS at any time. Any outstanding maintenance works and/or remedial measures identified during the inspections shall be carried out by the WUA within an agreed time schedule. If the WUA has not made satisfactory progress to remedy the areas of concern, the RD&WCD will undertake these works and recover all the costs from the WUA.

3.18 WUA Charges: The WUA shall assess, bill and collect the due charges in accordance with procedures approved by the majority of WUA members in order to finance the O&M of the entire MIS, the management of the WUA itself and the accumulation of a capital reserve. The WUA shall be financially self-sustainable and it shall not receive any subsidies from the GoM and/or others.

3.19 The WUA shall have the authority to levy non-members a higher O&M charges than for members, but it shall not be higher than two times the charge for members.

3.20 The WUA shall have two separate bank accounts in the name of the WUA at a bank approved by the RD&WCD and/or Registrar.

3.21 O&M Costs: The WUA shall deposit annually an amount equivalent to 0.5% of the total capital costs of Headworks and Distribution System for gravity irrigation schemes into the Operation & Maintenance Account for the O&M of the MIS and the management of the WUA itself. For lift irrigation schemes, an amount equivalent 0.5 % of the capital costs of Headworks and 1.5% of capital costs of WUA managed lift irrigation systems, shall be deposited by the WUA. For individual or small group lift distribution systems not managed by the WUA, each individual or group shall contribute its share of the O&M costs of the headworks to the WUA and will be responsible for 100% of the O&M costs for its own distribution system.

3.22 The WUA shall deposit an annual surcharge equivalent to at least 10% of the estimated annual O&M costs into the Development Fund for the accumulation of a capital reserve to finance emergency repairs, procurement, improvement works and/or repayment of bad debts.

3.23 Local Cess: The WUA shall be exempted from the payment of any Local Cess to the GoM.

3.24 Other Royalties and charges: The WUA shall pay an annual royalty of Rs 1000 per scheme to the Irrigation Department of the GoM.

3.25 Crop Freedom: All water users shall be totally free in growing any crop within the allocated water right on their lands within the command area of the WUA.

3.26 Annual O&M Plan: The WUA shall submit its annual O&M Plan and corresponding budget to the RD&WCD for review and approval.

3.27 Financial Audit: All statements of receipts and expenditures as well as statements of assets and liabilities of the WUA shall be audited annually by the Registrar.

3.28 Powers of Canal Officer: Within its area of jurisdiction, the WUA shall have the same powers as the Canal Officer in accordance with the relevant Act, Rule, Government Resolution, Order and/or circular, including the powers to enter land to inspect field work and to carry out repairs, to remove obstructions in the canal and drainage system and to impose sanctions, including fines, confiscation of irrigation equipment, temporary or permanent cessation of supply of irrigation water or provision of any other service, suspension of the right to vote or expulsion from the WUA, against any member or non-member of the WUA who unlawfully violates the Constitution and Bye-laws of the WUA, including any tampering or obstructing the distribution system, wilful damage to the physical structure and non-payment of due water charges.

3.29 Joint Irrigation Management: During a joint irrigation management period of at least two irrigation seasons, the RD&WCD shall closely monitor the O&M of the MIS by the WUA and the administrative and financial management of the WUA itself and, where required, arrange the provision of support and (additional) training.

3.30 Dispute Resolution: If a dispute arises between the WUA and RD&WCD then every effort shall be made to resolve the matter amicably within an agreed period of time without reference to a third party. Where an amicable settlement cannot be found, the dispute shall be resolved by arbitration in accordance with the Arbitration and Conciliation Act 1996 or any statutory amendment thereof.

3.31 Duration: The duration of the Irrigation Management Agreement shall be for a period of 50 years.

3.32 Termination: Where in the opinion of the RD&WCD, the WUA continues to fail in operating and maintaining the MIS satisfactory, the RD&WCD shall issue a written notice of intent to terminate the Irrigation Management Agreement.

3.33 in case of termination of the Irrigation Management Agreement, the WUA shall not be allowed to operate the headworks and the RD&WCD shall take all necessary measures to ensure that water can pass the headworks safely for use further downstream.

4 Status of Resolutions:

4.1 All above-mentioned resolutions shall be adopted on a trial basis for the MIS to be implemented during the Pilot Phase of MIP-M. Based on the experience gained during the Pilot Phase, any necessary modifications could be incorporated in order to prepare final resolutions prior to the start of the Main Phase.

This Government Resolution has been issued with the concurrence of the Finance Department vide Ref. No. 1645 Principal Secretary (6xp.), dated 20.11.98.

By order and in the name of the Governor of Maharashtra.

Ashok Sharma
(Ashok Sharma)
Joint Secretary
to Government of Maharashtra
RD&WCD

DEFINITIONS:

"Associated Structures" means the cross-drainage structures, road culverts, bridges and social facilities, such as animal drinking troughs, washing places and buffalo wallows/ramps.

"Chat Committee" means a committee formed by the majority of irrigators with land in the same outlet command for the purpose of operating and maintaining all irrigation, drainage and associated infrastructure within the command of the outlet.

"Command Area" means the area that can be irrigated by the MIS.

"Distribution System" means the canal or pipe system to convey water from the headworks to the field outlets of individual farms.

"Drainage System" means a natural drain, surface or sub-surface drainage network provided for the evacuation of the surplus sub-soil and surface water from the land within the command area.

"Electricity Connections" includes MSEB deposit for cost of control panel including meter, fuses, switches, wiring and other necessary equipment, and the costs for additional poles and line wiring in accordance with MSEB requirements.

"Farmers' Works" means the discrete component of the MIS construction works to be undertaken by the WUA under an agreement with the RD&WCD.

"Headworks" means any structure constructed in the riverbed to store and/or divert river water for irrigation purposes, including associated riverbank protection and/or water control works.

"Irrigation Charge" means the charge to be paid by the WUA into the Minor Irrigation Fund for any Major Repairs to the headworks to be undertaken by the RD&WCD.

"Major Repairs" means repairs of major damage due to natural calamities, deficiencies in design or construction.

"Minor Irrigation Scheme" means the entire irrigation system comprising headworks, distribution and drainage system and associated structures within the area of jurisdiction of the WUA.

"On-Farm Works" means all irrigation works (i.e. canals, pipes and irrigation equipment), drainage works and land development works (i.e. land levelling) within an individual farm.

"Outlet" means water control structure at the head of the field channel commanding an area (Chat) of up to 20 hectares.

"Scheme NGO" means a non-political and non-profit NGO which is registered under the Societies Act, 1860, and Bombay Trust Act, 1950, and which is appointed under contract to RD&WCD to work with a District as part of the Scheme Working Team, to facilitate the development of MIS in accordance with the PIDM approach.

"Water Charge" means the charges levied by the WUA in respect of water supplied from irrigation schemes for the purpose of irrigation.